

## **Arbuzov reaction in the series of halogenocyclenes: New synthetical and mechanistical variants**

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### **Abstract**

A new method of synthesis of phosphorylated furanones on the basis of tricoordinated phosphorus derivatives reaction with mucochloric acid and some of its derivatives is elaborated. The kinetic investigation of the reaction of phosphites (1, R = Me, Et, Pr, Bu, Ph) with mucochloric acid allowed to establish the reaction mechanism including competitive elimination of RCl or HCl from the obtaining intermediate. The ratio of these two possible reaction ways depends on the nature of substituents at phosphorus.

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### **Keywords**

Arbuzov reaction, Kinetics investigation, Phosphorylated furanones